

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 2005/000023

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: H04R 7/06

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: H04R

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0957658 A1 (OKUDA MASANAO ET AL), 17 November 1999 (17.11.1999), whole document --	1-4
A	WO 9956498 A1 (PANPHONICS OY), 4 November 1999 (04.11.1999) --	1-4
A	US 5615275 A (EDUARDO J. BERTAGNI), 25 March 1997 (25.03.1997) --	1-4
A	US 5283836 A (ANTHONY L. TRUFITT), 1 February 1994 (01.02.1994) --	1-4

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

\* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

26 May 2005

Date of mailing of the international search report

27-05-2005

Name and mailing address of the ISA/

Authorized officer

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**INTERNATIONAL SEARCH REPORT**

International application No.

**PCT/FI 2005/000023****C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p data-bbox="297 363 922 436">US 4928312 A (AMEL HILL), 22 May 1990 (22.05.1990)</p> <p data-bbox="646 468 776 520">-- -----</p>	1-4

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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

30/04/2005

International application No.

PCT/FI 2005/000023

EP	0957658	A1	17/11/1999	DE	69728170 D,T	02/09/2004
				HK	1023901 A	12/11/2004
				JP	3192372 B	23/07/2001
				JP	9331596 A	22/12/1997
				US	6008714 A	28/12/1999
				WO	9926451 A	27/05/1999

WO	9956498	A1	04/11/1999	AU	3712099 A	16/11/1999
				CA	2330377 A	04/11/1999
				EP	1060637 A	20/12/2000
				FI	980926 A	28/10/1999
				JP	2002513263 T	08/05/2002
				NO	20005393 A	26/10/2000

US	5615275	A	25/03/1997	WO	9501080 A	05/01/1995
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US	5283836	A	01/02/1994	AU	6434590 A	18/04/1991
				EP	0493450 A	08/07/1992
				WO	9104643 A	04/04/1991

US	4928312	A	22/05/1990	NONE		
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